

Notice of Allowability**Application No.**

09/919,831

Examiner

Kathleen M Kerr

Applicant(s)

BATHE ET AL.

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/5/04.
2. ☒ The allowed claim(s) is/are 34-39,41,43 and 59-61.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/20/01, 9/5/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Kathleen M Kerr
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DETAILED ACTION

Application Status

1. In response to the previous Office action, a Final rejection (mailed on January 14, 2004), Applicants filed a response and after-final amendment (twice) received on March 16, 2004 and April 5, 2004. The amendment received on March 16, 2004 was not in the proper format, incorrectly citing the status of the pending claims. The Examiner telephoned Applicants' representative to submit a new after-final amendment, which was received on April 5, 2004.

The April amendment amended Claim 35, cancelled Claims 40, 42, and 44-48, and added new Claims 59-64. Thus, Claims 34-39, 41, 43, and 49-64 are pending in the instant Office action.

Election

2. Claims 49-58 remain withdrawn from consideration as non-elected inventions. Claims 34-39, 41, 43, and 59-64 will be examined herein.

Priority

3. As previously noted, the instant application is granted the benefit of priority for provisional application 60/294,224 filed on May 31, 2001 (see transmittal sheet and Examiner's amendment) and for foreign applications 10043335.9 and 10109688.7 filed on September 2, 2000 and February 28, 2001, respectively. As previously noted, ribboned copies of the foreign priority documents have been received.

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Information Disclosure Statement

4. Attached is the IDS filed on September 5, 2002 signed previously by the Examiner on July 15, 2003 (attached to an Office action). Herein, references AY and AZ are crossed out because they are incomplete citations. The Examiner has set forth complete citations in the attached PTO-892. Said references had previously been considered; this correction is for a correct citation on the face of the patent.

Attached is the IDS filed on November 20, 2001; the noted references have been considered. Some references have been crossed out as duplicates.

As previously noted, references filed in an IDS on April 23, 2002 are duplicates, already considered as filed on the IDS of September 5, 2002. Moreover, related cases noted on September 5, 2002 and May 27, 2003 have been considered.

PTO-892 forms are attached hereto, attached to the Office action of July 18, 2003 and the Office action of January 14, 2004 (3 total).

Withdrawn - Objections to the Specification

5. Previous objection to the Abstract for not completely describing the disclosed subject matter (see M.P.E.P. § 608.01(b)) is withdrawn by virtue of Applicants' amendment and the Examiner's amendment below.

Withdrawn - Claim Objections

6. Previous objection to Claim 35 for improper English is withdrawn by virtue of Applicants' amendment.

7. Previous objection to Claim 45 for improper English and a spelling error is withdrawn by virtue of Applicants' cancellation of said claim.

Withdrawn - Claim Rejections - 35 U.S.C. § 112

8. Previous rejection of Claim 48 under 35 U.S.C. § 112, second paragraph, is withdrawn by virtue of Applicants' cancellation of said claim.

9. Previous rejection of Claims 45-47 under 35 U.S.C. § 112, first paragraph, scope of enablement, is withdrawn by virtue of Applicants' cancellation of said claims.

Status of Previously Pending Objections/Rejections

10. All previously pending objections/rejections have been withdrawn by virtue of Applicants' amendment and/or the Examiner's amendment below authorized by Applicants' representative.

EXAMINER'S AMENDMENT

11. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel Pereira (under customer number 22850) on April 7, 2004.

Amendments to the Specification

12. The specification has been amended as follows:

a) Substitute the pending Abstract with the following Abstract:

---The present invention relates to isolated polynucleotides from *Corynebacterium glutamicum* encoding proteins of the transcription activator (MetR) and O-succinylhomoserine sulfhydrylase (MetZ). The invention also relates to producing L-amino acids, particularly methionine, in coryneform cells having attenuated metR and metZ genes.---

b) Insert the following before the first paragraph of the specification:

---This application claims priority to U.S. Provisional Application 60/294,224 filed on May 31, 2001.---

Amendments to the Claims

13. The claims have been amended as follows:

a) Cancel Claims 49-58 as drawn to a non-elected invention.

b) Cancel Claim 62-64.

c) Rewrite Claims 34-39, 41, 43, and 59-61 (all pending and allowed claims) as follows:

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---34. An isolated polynucleotide fragment comprising:

(a) a nucleotide sequence that encodes a protein which comprises the amino acid sequence of SEQ ID NO:2 or

(b) a nucleotide sequence which is fully complimentary to (a).

35. The isolated polynucleotide fragment of Claim 34, which is capable of replication in coryneform bacteria.

36. The isolated polynucleotide fragment of Claim 34, wherein the polynucleotide fragment is RNA.

37. The isolated polynucleotide fragment of Claim 34, which comprises a nucleotide sequence that encodes a protein which comprises the amino acid sequence of SEQ ID NO:2.

38. The isolated polynucleotide fragment of Claim 34, which comprises the nucleotide sequence of SEQ ID NO:1.

39. A vector comprising the isolated polynucleotide fragment of Claim 34.

41. A vector comprising the isolated polynucleotide fragment of Claim 37.

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43. A vector comprising the isolated polynucleotide fragment of Claim 38.
59. An *Escherichia coli* cell transformed with the isolated polynucleotide fragment of Claim 34.
60. An *Escherichia coli* cell transformed with the isolated polynucleotide fragment of Claim 37.
61. An *Escherichia coli* cell transformed with the isolated polynucleotide fragment of Claim 38.---

Reasons for Allowance

14. The following is an Examiner's statement of reasons for allowance:

The instant claims are free of the prior art. Pompejus et al. (WO 01/00843), previously cited in a rejection under 35 U.S.C. § 102(a) (see Office action July 18, 2003), is not prior art on the pending claims by virtue of (1) the earliest effective filing date (September 2, 2000) granted to the instant application with the filing of translations of foreign priority documents and their disclosure of the claimed invention and (2) the fact that the sequence of Pompejus et al. contains a single mismatch with respect to SEQ ID NO:1 that results in a single mismatch with respect to the encoded protein. Nakagawa et al. (USPAP 2002/0197605 and EP 1108790) is not prior art, as previously noted by virtue of the effective filing date granted for the instant application; moreover, the fragment language of Claims 34-38, as amended above, clearly frees SEQ ID

NO:1, claimed in the instant application, from the sequence taught in Nakagawa *et al.* (3,309,400 base pairs representing the entire *C. glutamicum* genome). The instant claims are clear, enabled, and fully supported by the specification as originally filed. Moreover, the claimed polynucleotides, vectors, and host cells have patentable utility in the attenuation of metR/metZ in *C. glutamicum*, as shown in the examples, for the production of methionine.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

15. Claims 34-39, 41, 43, and 59-61 are allowed as amended above, authorized by Applicants' representative.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Kerr whose telephone number is (571) 272-0931. The examiner can normally be reached on Monday through Friday, from 9:00am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathupura Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kathleen M Kerr
Examiner
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April 15, 2004